

<b>Mattingly Products Company, Inc.</b>	)	<b>Departmental</b>
<b>Somerset County</b>	)	<b>Findings of Fact and Order</b>
<b>North Anson, Maine</b>	)	<b>Air Emission License</b>
<b>A-123-71-I-A</b>	)	<b>Amendment #2</b>

After review of the air emissions license minor revision application, staff investigation reports and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

## **I. REGISTRATION**

### **A. Introduction**

1. Mattingly Products Company, Inc. of North Anson, Maine was issued Air Emission License A-123-71-G-R on April 4, 2001 permitting the operation of emission sources associated with their North Anson, Maine asphalt batch plant, concrete batch plant and crushed stone facility.
2. Mattingly Products Company, Inc. subsequently amended the license to reflect the two previously licensed diesel units (Diesel #2 and Diesel #4) being replaced with a new 355 kW diesel unit to be designated Diesel #5. The amendment also reflected a change from #2 fuel with a sulfur content of no greater than 0.5% sulfur by weight to diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight.
3. Mattingly Products Company, Inc. has requested an amendment of their air emissions license to allow for the removal of the currently licensed Barber Greene manufactured hot mix asphalt plant and subsequently replace it with a new Cedar Rapids manufactured batch plant.
4. Mattingly Products Company, Inc. has also requested an amendment of their air emissions license to allow for the removal of a diesel unit rated at 230 kW, currently designated diesel #3 and replace it with a 355 kW diesel unit to be designated Diesel #6.
5. This amendment shall also reflect the addition of a new primary Jaw Crusher to the Mattingly Products Company, Inc. license.

Mattingly Products Company, Inc.  
Somerset County  
North Anson, Maine  
A-123-71-I-A

)  
)  
)  
2

Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #2

#### B. Emission Equipment

Mattingly Products Company, Inc. is applying to include the operation of the following equipment to its air emissions license:

##### Process Equipment

<u>Equipment</u>	<u>Production Rate (Tons/hr)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Date of Manufacture</u>	<u>Control Devices</u>
Asphalt Batch Plant	300	55	1976	Baghouse

##### Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Power Output (kW)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Diesel #6	3.46	355	25.3	Diesel fuel, 0.05%

#### C. Application Classification

The amendment to replace the hot mix asphalt plant and the 230 kW diesel unit with the new batch plant and the new 355 kW diesel unit will not result in a significant emissions increase of regulated pollutants. Therefore, this application is considered a minor modification and has been processed as such.

## II. BEST PRACTICAL TREATMENT (BPT)

#### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

**Mattingly Products Company, Inc.**  
**Somerset County**  
**North Anson, Maine**  
**A-123-71-I-A**

)  
)  
)  
**3**

**Departmental**  
**Findings of Fact and Order**  
**Air Emission License**  
**Amendment #2**

**B. Asphalt Batch Plant**

Mattingly Products Company, Inc. has requested to replace the currently licensed hot mix asphalt plant at their North Anson facility with a new asphalt batch plant. The new asphalt batch plant was manufactured in 1976 by Cedar Rapids, has a maximum design heat input capacity of 55 MMBtu/hr and is capable of producing 200 ton per hour (tons/hr) of asphalt. The asphalt batch plant makes use of a baghouse for particulate matter emissions control.

The performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt batch plant is in operation.

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Mattingly Products Company, Inc. shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.

The asphalt batch plant is subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities. Mattingly Products Company Inc. shall comply with the particulate matter and opacity performance testing requirements of 40 CFR 60 Subpart I 60.93 to demonstrate compliance with the particulate matter and opacity standards set forth in this license. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Mattingly Products Company, Inc. shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7-day notice to the regional inspector.

A summary of the BACT analysis for the Asphalt Plant is as follows.

1. BACT for PM is emissions not to exceed 0.03 gr/dscf.
2. For the firing of diesel fuel oil, BACT is a sulfur content not to exceed 0.05% sulfur by weight.
3. SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission limits are based upon AP-42 data dated 12/00 for #2 fuel.
4. Visible Emissions for the Asphalt Batch Plant is limited to no greater than 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period

**C. Diesel Units**

Mattingly Products Company, Inc. operates three diesel engines for producing power to run the equipment at their facility. Diesel #1 is a 60 kW diesel generator set, Diesel #3 is a 230 kW diesel generator set and Diesel #5 is a 355 kW generator set. Mattingly Products Company, Inc. has requested to replace the currently licensed Diesel #3 with a new 355 kW diesel unit to be designated Diesel #6.

A summary of the BACT analysis for the new Diesel Generator #6 is as follows:

1. BACT for new diesel engines is use of diesel fuel oil with a sulfur content of 0.05% sulfur by weight.
2. The PM/PM<sub>10</sub> limits are derived from Chapter 103.
3. SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC emissions rates are based on AP-42 emission factors for diesels of less than 600 HP dated 10/96.
4. Visible emissions limits are based on performance data from similar diesel fuel fired diesels of this size and age:

Visible emissions from each diesel engine stack shall not exceed 20% opacity on a six-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

**D. Primary Jaw Crusher**

Mattingly Products Company, Inc. is also bringing a new primary Jaw Crusher into operation. The primary Jaw Crusher was manufactured in 1928 with a rated capacity of approximately 300 tons per hour. The primary Jaw Crusher is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crusher is particulate emissions. To meet the requirements of Best Available Control Technology (BACT) for control of particulate matter (PM) emissions from the rock crusher, Mattingly Products Company, Inc. shall operate and maintain water sprays on the rock crusher.

Visible emissions from the rock crusher shall be limited to no greater than 10% opacity on a (6) six-minute block average basis.

**Mattingly Products Company, Inc.**  
**Somerset County**  
**North Anson, Maine**  
**A-123-71-I-A**

)  
)  
)  
**5**

**Departmental**  
**Findings of Fact and Order**  
**Air Emission License**  
**Amendment #2**

**E. Annual Emission Restrictions**

Mattingly Products Company, Inc. shall be restricted to the following annual emissions, based on a 12 month rolling total:

- Total annual facility fuel use shall be limited to 150,000 gallons of diesel fuel with a sulfur content not to exceed 0.05% by weight.
- Total facility fuel use of diesel fuel in the diesel generator units shall be limited to 40,000 gallons per year based on at twelve month rolling total.

**Total Allowable Annual Emission for the Facility**  
(used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>Tons/Year</u></b>
PM	1.8
PM <sub>10</sub>	1.8
SO <sub>2</sub>	3.8
NO <sub>x</sub>	17.1
CO	19.1
VOC	1.3

**III.AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a non major source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. An air quality analysis is not required for this amendment.

**ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-123-71-I-A subject to the conditions found in Air Emission License A-123-71-G-R, in Air Emission License Amendment A-123-71-H-M and in the following conditions:

**The following condition shall replace condition (16) paragraph g. in Air Emission License A-123-71-G-R and condition (16) paragraph g. in Air Emission License amendment A-123-71-H-M:**

- (16) g. The asphalt kiln shall be limited to a maximum of 55.0 MMBtu/hr heat input firing diesel fuel oil with a sulfur content not to exceed 0.05 % sulfur by weight. Emissions from the baghouse shall not exceed the following:

<b>Pollutant</b>	<b>Grs/dscf</b>	<b>Lb/hr</b>	<b>Tons/yr</b>
PM	0.03	6.9	1.0
PM	-	6.9	1.0
SO <sub>2</sub>	-	26.4	3.6
NO <sub>x</sub>	-	36.0	4.9
CO	-	120.0	16.4
VOC	-	2.5	0.4

**The following shall be in addition to condition (16) in Air Emission License A-123-71-G-R**

- (16) h. Mattingly Products Company Inc. shall comply with the particulate matter and opacity performance testing requirements of 40 CFR 60.93. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Mattingly Products Company Inc. shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7-day notice to the regional inspector.

**The following shall be in addition to condition (18) in Air Emission License A-123-71-G-R:**

- (18) d. The new primary Jaw Crusher shall be included in the requirements of condition (18) of Air Emission License A-123-71-G-R.

**The following condition shall replace condition (19) paragraphs C., F. and G. in Air Emission License A-123-71-G-R and condition (19) paragraphs C., F. and G. in Air Emission License amendment A-123-71-H-M:**

- (19) C. Mattingly Products Company, Inc. shall maintain fuel use records indicating fuel usage for each diesel unit and hours of operation for each diesel unit. Mattingly Products Company, Inc. shall calculate fuel usage based on diesel firing rates and hours of operation (hours of operation multiplied by gallon per hour firing rate equals fuel burned). The diesel firing rates for each diesel are as follows:

Mattingly Products Company, Inc.  
Somerset County  
North Anson, Maine  
A-123-71-I-A

)  
)  
)  
7

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #2**

<u>Equipment</u>	<u>Maximum Firing Rate (gal/hr)</u>
Diesel #1	4.3
Diesel #5	25.3
Diesel #6	25.3

F. Fuel use records and receipts indicating volume of diesel fuel delivered, delivery date and percent sulfur content for Diesel #1, Diesel #5, and Diesel #6 shall be maintained for at least (6) six years and available upon request to the Department. Past fuel use records and receipts for Diesel #3, shall be kept in record for (6) six years after its removal from service.

G. Diesel emissions shall not exceed the following:

<b>Equipment</b>		<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Diesel #1	lb/hr	0.2	0.2	0.03	2.6	0.6	0.2
Diesel #5	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.4	0.4	0.2	15.3	3.3	1.2
Diesel #6	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.4	0.4	0.2	15.3	3.3	1.2

**The following are new conditions to Air Emissions License A-123-71-G-R**

(28) This amendment shall expire concurrently with Air Emission License A-123-71-G-R.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: **June 6, 2003**

Date of application acceptance: **June 11, 2003**

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by, Peter G. Carleton, Bureau of Air Quality